

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Digital Audio Broadcasting Systems	)	MB Docket No. 99-325
And Their Impact On The Terrestrial	)	
Radio Broadcast Service	)	
To: The Commission		

**COMMENTS**

**Backyard Broadcasting, LLC  
Beasley Broadcast Group, Inc.  
Black Crow Media Group, L.L.C.  
Bonneville International Corp.  
Broadcast Electronics, Inc.  
CBS Radio Inc.  
Clear Channel Communications, Inc.  
Commonwealth Broadcasting  
Corporation  
Commonwealth Public Broadcasting  
Corporation**

**Continental Electronics Corp.  
Cox Radio, Inc.  
Emmis Communications Corporation  
Entercom Communications Corp.  
Greater Media, Inc.  
Harris Corporation  
Journal Broadcast Corporation  
Lincoln Financial Media Company  
Nassau Broadcasting Partners, L.P.  
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December 5, 2008

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## **SUMMARY**

The Joint Parties filing these comments include local, regional, and national broadcasters that operate commercial and non-commercial FM radio stations, as well as the four largest broadcast equipment manufacturers. The Joint Parties strongly urge the Commission to increase the maximum digital power at which FM stations are permitted to operate from the current level of 1 percent (-20 dBc) to 10 percent (-10 dBc) of a station's authorized analog power.

Free, over-the-air HD Radio offers numerous public interest benefits, including better audio fidelity, multicast channels that will increase program format diversity and reach niche audiences, and the possibility of new auxiliary services providing vital information and entertainment to listeners. Approximately 1,800 radio stations have already initiated digital operation with more than 930 additional multicast channels available nationwide.

However, the effectiveness of many HD Radio stations remains hampered by their inability to replicate their analog coverage areas. This abbreviated digital audience reach is a function of the very conservative power levels at which FM digital stations initially have been permitted to operate. The requested power increase would directly address this problem.

The power increase request is based on extensive real-world studies conducted by several broadcasters and iBiquity Digital Corporation that were designed to determine: (i) whether the digital power increase would enhance the performance of FM HD Radio, both in terms of increased digital service areas so as to essentially replicate analog coverage, and with respect to enhanced building penetration; and (ii) the effect of the requested power increase on digital/analog compatibility – specifically, the impact of increased digital power operation on first adjacent analog operations.

The tests demonstrated that the digital power increase would dramatically improve the geographic coverage of FM digital operations, allowing them to more closely replicate analog

coverage and reducing digital signal drop outs within current service areas due to shadowing. The tests also demonstrated that the power increase would significantly increase building penetration within existing station contours. Finally, the test program included a subjective, real-world audio interference component. General population audio evaluations were conducted by an independent university to assess the degree of detectable interference to first adjacent analog stations due to increased digital operation. That study found in the majority of instances, listeners to adjacent analog stations did not hear meaningful impact from the increase in digital power.

Although the test program was conducted over a significant period of time, not one interference complaint was received by any of the test stations, or, to the Joint Parties' knowledge, were any complaints filed with the FCC. Thus, the test program indicates that the power increase may, at most, have a tolerable potential for interference in limited first adjacent analog situations.

The Joint Parties have reviewed the digital interference study prepared by NPR Labs and note that it included multiple laboratory predictions and utilized a worst case scenario; namely, that in predicting interference to each analog station, NPR assumed that all adjacent stations were operating digital at the full 10 percent increased power level. NPR itself acknowledged this scenario is not likely to occur. NPR has publicly stated that it is not fundamentally opposed to – and sees the need for – a substantial digital power increase. Thus, the Joint Parties hope to work with iBiquity and NPR Labs to identify those circumstances in which a particular FM station's digital operations may need to be conditioned to avoid unacceptable levels of harmful interference.

The Joint Parties therefore respectfully request that the Commission allow FM stations to increase their digital power to up to -10 dBc below their analog carrier as described herein.

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**COMMENTS**

The signatories hereto (“Joint Parties”), by their attorneys, hereby submit their Comments in response to the October 23, 2008 Public Notice in the above-captioned proceeding.<sup>1</sup> The Joint Parties consist of local, regional and national broadcast licensees that operate commercial and non-commercial FM radio stations nationwide, as well as the four largest broadcast equipment manufacturers. Joint Parties hereby support the June 18, 2008 request, described in the Public Notice, that the Commission revise the technical specifications for FM digital audio broadcasting operation by increasing the allowable maximum digital operating power of FM broadcast stations from the current level of 1 percent (-20 dBc) to 10 percent (-10 dBc) of a station’s authorized analog power.<sup>2</sup>

The Joint Parties have also reviewed the Digital Radio Coverage & Interference Analysis Research Project conducted by NPR Labs (the “*NPR Study*”), also described in the Public

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<sup>1</sup> *Comment Sought on Joint Parties Request for FM Digital Power Increase and Associated Technical Studies*, FCC 99-325 (rel. Oct. 23, 2008) (“*Public Notice*”).

<sup>2</sup> See Letter to Ms. Marlene Dortch from the Joint Parties dated June 10, 2008 (MD Docket No. 99-325) (the “*HD Power Increase Request*”).

Notice. Joint Parties respectfully submit that certain of the assumptions and methodologies utilized in preparing the NPR Study likely resulted in an overstatement of predicted harmful interference to first adjacent analog operations that would result from the requested digital FM power increase. However, the Joint Parties nevertheless look forward to working with NPR Labs to address and resolve the disparities between the NPR Study and the studies underpinning the HD Power Increase Request.

## **I. Introduction**

The Commission has long recognized the long-term benefits of free, over-the-air HD Radio to the listening public. As the FCC has noted, HD Radio “promises the benefits that have generally accompanied digitalization – better audio fidelity, more robust transmission systems, and the possibility of new auxiliary services.”<sup>3</sup> HD Radio “permits the transmission of near-CD quality audio signals on the FM band, and improved fidelity on the AM band [as well as] information services, such as station, song and artist identification, stock and news updates, and local traffic and weather bulletins.”<sup>4</sup> The substantial public interest benefits that HD Radio will provide have motivated the Commission to take “significant steps to facilitate the digital radio conversion by adopting rules and policies that encourage radio stations to invest in digital equipment and programming.”<sup>5</sup>

Consequently, broadcasters have made a substantial investment in HD Radio technology. Currently, there are approximately 1,800 radio stations transmitting a primary digital HD Radio

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<sup>3</sup> *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, First Report and Order, 17 FCC Rcd 19990, 19991 (2002).

<sup>4</sup> *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, Second Report and Order, First Order on Reconsideration and Second Further Notice of Proposed Rulemaking, 22 FCC Rcd 10344, 10347 (2007).

<sup>5</sup> *Id.*, at 10351.

signal with more than 930 additional multicast channels currently available nationwide. With the average cost of converting a station to digital operation costing between \$125,000 and \$150,000, broadcasters have spent in excess of \$225 million on HD Radio technology. This does not include the significant recurring costs of talent, programming, maintenance, and electricity necessary to keep these stations operational. As a result of the wide-spread upgrade of stations to digital capability, free, over-the-air HD Radio has already been made available to approximately ninety (90) percent of the U.S. population.<sup>6</sup> Beyond digital conversion costs, broadcasters have invested more than \$680 million in an extensive marketing campaign to introduce HD Radio technology to consumers.<sup>7</sup>

In addition to substantially enhanced audio fidelity, HD Radio promotes spectrum efficiency by enabling broadcasters to present multiple program streams using the same bandwidth previously devoted to a single audio channel used for analog transmissions. These multicast operations allow stations to provide a broader range of programming, targeted to a wide diversity of audiences. Broadcasters are taking advantage of this multicast opportunity to provide the listening public with a vast array of niche and innovative programming, such as the following:

- Beasley Broadcasting's Gretchen 99.9 on WKIS(FM)'s HD2, is named after country singer Gretchen Wilson, who provides voice-overs and other input on a channel showcasing music for "rebels, innovators and non-conformists."
- Bonneville International's "iChannel" is composed entirely of unsigned independent artists. The channel features the best independent artists from all over the world in a wide open format of non-genre specific rock based music. Many of the bands featured

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<sup>6</sup> Harriet Howard Heithaus, *Don't Call It HD, Call It 'Responsive Radio,'* NaplesNews.com, Sept. 28, 2008, <http://www.naplesnews.com/news/2008/sep/28/dont-call-it-hd-call-it-responsive-radio>.

<sup>7</sup> HD Radio Alliance, *HD Digital Radio Alliance Renews Charter with Marketing Commitment that Takes Total to \$680 Million*, Oct. 15, 2007, available at: [http://www.hdradio.com/i/Alliance\\_Charter.pdf](http://www.hdradio.com/i/Alliance_Charter.pdf).



on the channel stop by the studios in St. Louis to perform a live acoustic set named “iCoustix”. “iChannel” is distributed via satellite to Bonneville International’s HD2 stations in Washington D.C., Chicago, Cincinnati, St. Louis, Phoenix and Salt Lake City. In addition, WIL(FM)’s HD2 in St. Louis features “Kerosene Country”, a contemporary mix of the newest Country Music out of Nashville.

- CBS Radio’s KLLI(FM) in Dallas features independent and unsigned artists, WNCX-FM’s multicast channel provides Cleveland’s only Spanish language service, and WNEW resurrected its legendary New York FM station format on that station’s secondary digital channel, where modern bands such as Vampire Weekend are mixed with archival interviews, such as John Lennon and David Bowie.
- Clear Channel’s “KBCO HD2 The Studio C Channel,” airs programming that is produced locally in Boulder. Each of the songs broadcast on the HD2 channel has been recorded live at KBCO(FM)’s Studio C during live “sessions” of local artists, which normally include two or three songs. The station also airs interviews with the guest artists. KBCO Studio C also hosts local area bands for live performances during “KBCO Studio C Local Edition,” aired weekly on HD2 Studio C.

Clear Channel is also continuing to develop additional content for its HD2 channels, including programming focusing on business, religion, and a new talk format targeted specifically at issues affecting women. Many of these new HD2 formats are created by Clear Channel’s innovative “Format Lab,” which develops and provides new, unique, diverse programming for stations (including genres that have long been marginalized). All programming generated by Clear Channel’s Format Lab is made available to rival broadcasters, who can use the programming as-is or can choose to supplement the elements – which include continually refreshed playlists, imaging and spoken-word vignettes – with their own locally customized content to create fully localized radio channels. To date, Format Lab has developed over 80 channels available for broadcast, helping to ensure the availability of new and compelling programming.

- Emmis Communications Corporation’s WQHT(FM) in New York, KPWR(FM) in Los Angeles, and WLUP-FM in Chicago, each provide South Asian programming.
- Entercom’s *Northwest Bands* channel streams broadcasts on KNRK(FM) in Portland and KNDD(FM) in Seattle, which features all-local bands. Entercom also features a comedy format on KKWF(FM)’s HD2 channel in Seattle.
- Greater Media’s *Riff 2* on WRIF(FM) in Detroit programs independent artists, its *Irish HD* features an all-Irish music format on WTKK(FM)’s HD2 channel in Boston, and *Radio You* is broadcast on WBOS(FM)’s HD2 channel in Boston, which is largely programmed by college students and features original and live programming desired by that audience.

Broadcasters are also able to make use of HD Radio's enhanced spectrum efficiency to provide a variety of datacasting and auxiliary services. Examples of these services include an iTunes tagging feature which allows listeners with an enabled HD Radio to "tag" songs being played on the HD Radio for later purchase via the push of a button. In addition, a number of the Joint Parties have helped form the Broadcaster Traffic Consortium,<sup>8</sup> which will use HD Radio technology to broadcast real-time traffic and other location-based information, such as weather information and gas prices, to portable navigation devices and automobile in-dash systems. Of course, these innovative applications are merely the first generation of advanced data delivery services that will provide significant benefits to consumers.

Service providers and equipment manufacturers are currently assessing the use of HD Radio for distribution of these types of content and are comparing HD Radio's coverage with other distribution streams. For HD Radio's full potential to provide these types of services to be realized, HD Radio coverage must at least equal current analog FM coverage, which for many stations is not the case given current maximum digital power levels.

Notwithstanding the significant investment in HD Radio and the creative programming provided by terrestrial broadcasters, the effectiveness of the medium remains challenged by its inability to reach a sufficient number of listeners. In some cases, the very conservative power levels at which FM digital stations are currently permitted to operate significantly limits their ability to effectively provide HD Radio to many listeners who receive their analog broadcasts,

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<sup>8</sup> The Broadcaster Traffic Consortium's founding members and bandwidth contributors are: Beasley Broadcast Group, Inc., Bonneville International Corporation, Cobalt Media, Cox Radio, Inc., Cumulus Media, Emmis Communications Corporation, Entercom Communications Corp., Greater Media, Inc., Hubbard Broadcasting, Lincoln Financial Media Company, NPR, and Radio One, Inc.

constraining geographic replication of analog and precluding effective indoor reception/building penetration.<sup>9</sup>

As a result of these power-based limitations, several broadcasters included among the Joint Parties collaborated with iBiquity Digital Corporation (“*iBiquity*”) to develop and conduct extensive field tests focused on two primary considerations: (i) whether a significant digital power increase would enhance performance, in terms of both increased digital service areas so as to essentially replicate analog coverage, as well as building penetration; and (ii) the effect on digital/analog compatibility, and more particularly the impact of increased digital power on first adjacent channel analog operations in a variety of scenarios. This comprehensive test program was designed to examine real world conditions, using currently operating broadcast stations.

The multifaceted testing program described in the HD Power Increase Request demonstrated that the requested digital power increase would dramatically improve both geographic coverage and building penetration, while causing at most an eminently tolerable potential for interference in limited first adjacent analog situations. In addition to subjective, independent review of test results which demonstrated these conclusions, it is telling that even though the various test stations operated at elevated digital power levels for significant periods of time during these tests (and one – KROQ – continues to operate at such higher digital power level today) not one listener or station interference complaint was received by any of the test stations, or, to our knowledge, filed with the FCC.

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<sup>9</sup> For example, CBS Radio’s WCBS-FM and Clear Channel’s WKTU(FM), Class B stations which broadcast from the Empire State Building, must operate at extremely low digital levels -- WCBS-FM at 67 watts and WKTU(FM) at 60 watts.

## **II. Impact of HD Power Increase on Digital Signal Coverage**

To determine the impact of increased HD FM power on digital signal coverage, the test program observed the reliability of digital signal reception of four Class B FM stations and three Class A stations in diverse markets, selected to analyze a variety of profiles while the digital signal operated at the -10 dBc and -20 dBc digital power levels.<sup>10</sup> The test methodology established a series of radials from each station to analyze listenability at existing and increased digital power levels. Using this real-world data, maps were then created comparing digital coverage at current and proposed power levels.

For each test station, the increased digital power operation resulted in dramatically improved digital coverage.<sup>11</sup> The Class B test stations experienced an average increase of 24% in service radius and an average of 56% gain in geographical coverage area.<sup>12</sup> The Class A test stations experienced an even more pronounced average increase of 30% in service radius and an average 67% gain in geographic coverage area.<sup>13</sup> The more pronounced increase in the Class A stations' performance is due to the low analog power levels at which these stations are licensed to operate. The limited Class A analog operations in turn results in an essentially nominal digital operation – *e.g.*, a 3 kW Class A station can operate with only 30 watts digitally – such that

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<sup>10</sup> See *HD Radio System Test Report – Compatibility and Performance Tests at Elevated FM Digital Power Level*, 99-325, iBiquity Digital Corporation (May 2008) (the “*Compatibility and Performance Report*”). More detailed reports regarding the various phases of the test program were appended to the *Compatibility and Performance Report*, including *FM HD Radio System Performance at Elevated Carrier Levels*, iBiquity Digital Corporation (Dec. 2007) attached as Appendix B (the “*FM Performance Report*”) and *Consumer Testing – HD Radio System Testing at Increased Power Levels*, Salisbury University (Aug. 6, 2007) attached as Appendix C (the “*Consumer Report*”), and *FM IBOC Building Penetration Tests at Elevated Digital Subcarrier Levels*, 99-325, CBS Radio Inc. (May 2008) (the “*Building Penetration Report*”).

<sup>11</sup> *Compatibility and Performance Report*, at 3.

<sup>12</sup> *FM Performance Report*, at 13.

<sup>13</sup> *Id.*

currently authorized digital transmissions may be near or below the existing noise floor.<sup>14</sup>

Consequently, the requested digital power increase can be expected to provide a critically necessary and outsized benefit to Class A stations.

Operating at the increased digital power also significantly reduced digital signal loss or drop outs in areas within the -20 dBc digital service area that are caused by shadowing or other similar causes.<sup>15</sup> Such signal shadowing and drop outs have a particularly negative impact on the viability and effectiveness of secondary (HD2 or HD3) digital transmissions. While each station's primary (HD1) digital channel has a simulcast analog signal that receivers automatically substitute when the digital channel cannot be received, secondary digital channels do not have such analog replication; accordingly, if reception of the secondary digital signal is impaired due to shadowing or drop out, the secondary digital channel simply disappears. Thus, the requested power increase is even more critical to ensure the ability of HD Radio to fulfill its potential to provide diverse, innovative program offerings by means of multiplexed HD2 and HD3 digital channels. Reliable full market coverage is also critical for data-based application services such as those in development by the Broadcaster Traffic Consortium and Clear Channel Total Traffic Network, which are developing content designed to assist consumers to avoid road congestion, to gain awareness of dangerous weather conditions, or to find the most economical fuel prices.

The limited digital FM power levels at which stations currently operate prevent many stations from providing digital service that is comparable to their analog service, both in terms of geographic coverage and consistent reception within their service areas due to drop outs. The elevated digital power tests demonstrated that the requested increase in permissible digital operations would allow FM HD Radio stations to more closely replicate their analog coverage by

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<sup>14</sup> *Compatibility and Performance Report*, at 7.

<sup>15</sup> *Id.* at 5.

expanding the geographic reach of their currently limited operations and by reducing the occurrence of signal drop outs due to shadowing and related issues.<sup>16</sup> As a result, listeners accustomed to receiving a particular FM station's analog signal would be able to enjoy the station's digital broadcasts in a comparable geographic area.

### **III. Impact on Digital Building Penetration**

The HD Power Increase Request included an extensive study of the impact of the proposed power increase on signal building penetration. The test program made measurements of KROQ-FM, a Los Angeles station, at the currently authorized digital power level and at the elevated -10 dBc power level at various locations in the Los Angeles metro area.<sup>17</sup> Ten discrete test locations -- including residential single-family and apartment buildings, downtown office buildings, and underground parking garages -- were carefully selected to measure building penetration effects in various scenarios.<sup>18</sup> Nine of these locations were within, and the tenth was just outside, of the station's protected contour.

The results were compelling. The study found that at 75% of the indoor locations, analog reception was described as "noisy or poor," with no digital reception whatsoever when the station was operating at the -20 dBc level.<sup>19</sup> When the station's digital power level was elevated to -10 dBc, the digital signal could be reliably received at 75% of the locations and at certain positions at the remaining locations;<sup>20</sup> a dramatic improvement that will have a significant impact for in-home or at-office listeners within the station's protected contour.

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<sup>16</sup> *Id.* at 20.

<sup>17</sup> *Building Penetration Report*, at 2.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at 5.

<sup>20</sup> *Id.*



#### **IV. Impact on Analog Operations**

While Joint Parties support the rapid transition to digital broadcasting, they recognize that this evolution, being “in band on channel” without a fixed transition date, must avoid interference to continued analog operations. All of the broadcasters joining these comments today depend primarily upon their analog operations, and thus well appreciate that any HD Radio implementation plan should avoid undue harmful interference to analog radio reception.

Accordingly, to determine the potential impact of the requested FM HD Radio power increase on analog broadcasting, the effects of the digital operation of three carefully and thoughtfully selected test stations were examined – KOST(FM), Los Angeles, California; WCSX(FM), Detroit, Michigan; and WKCI-FM, New Haven, Connecticut. Specifically, current and proposed digital operations were documented to determine the impact on first adjacent analog signals.<sup>21</sup> The test stations were selected so as to create four discrete first adjacent interference scenarios: (i) a Class B analog signal was observed as impacted by a Class B digital station’s current and elevated signals; (ii) a Class B analog signal was observed as impacted by a short-spaced Class B digital station’s current and elevated signals; (iii) a Class “Super B” analog signal was observed as impacted by a Class “Super B” digital station’s current and elevated signals; and (iv) a Class B analog signal was observed as impacted by a Class “Super B” digital station’s current and elevated signals.<sup>22</sup>

Audio recordings were made of the analog transmissions of first adjacent stations while the test stations operated at current and proposed digital power levels.<sup>23</sup> To further test the real world implications of the proposed digital FM power increase, audio recordings were made on

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<sup>21</sup> See *Consumer Report*, at 4.

<sup>22</sup> *Compatibility and Performance Report*, at 8

<sup>23</sup> *Id.*

six commercially available digital receivers representing a wide range of market segments.<sup>24</sup>

The audio recordings then were submitted to an independent, subjective review and analysis, conducted by Salisbury University using 80 general population listeners of diverse ages.<sup>25</sup>

The audio tests concluded, generally, that “raising the digital power ratio from -20 dBc to -10 dBc does not affect listeners’ opinions [of first adjacent analog receptivity] in most interference scenarios.”<sup>26</sup> The experiment found that, at the protected contour, evaluators rated the first adjacent signal’s listenability similarly when the digital station’s interfering signal operated at both -10 dBc and -20 dBc except in the Class B to short-spaced Class B scenario, where a more noticeable impact was discerned.<sup>27</sup>

Based on the subjective evaluations of the 80 audio evaluation participants, Salisbury University concluded that “in the majority of cases listeners to adjacent channel analog stations would not experience meaningful impact from the increase in digital power,”<sup>28</sup> and found that the Class B to short-spaced Class B scenario “presents the only situation where the increased digital power potentially increases the impact on analog operations.”<sup>29</sup> However, it should be noted that the short spaced stations selected for review in the field tests “represent particularly challenging scenarios that would not be typical in most listening situation.”<sup>30</sup> Thus, permitting discretionary digital power increases would likely have an even more nominal adverse impact than detected in the Salisbury University evaluation.

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<sup>24</sup> *Id.*

<sup>25</sup> *See Consumer Report*, at 6.

<sup>26</sup> *Id.* at 7.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*, at 7

<sup>29</sup> *Id.* at 8.

<sup>30</sup> *Compatibility and Performance Report*, at 11.



In the HD Power Increase Request, it was recommended that “Super B” stations should be limited to the greater of: (i) 20 dB below its currently authorized analog power (as is permissible under the FCC’s current rules), or (ii) at least 10 dB below the maximum analog power authorized for this class of station, as adjusted for height, absent any grandfathered super power.<sup>31</sup>

Joint Parties believe that with the requested increase in digital power levels at which FM broadcast stations are permitted to operate, subject to the restriction for Super B stations set forth above, the Commission will greatly accelerate the conversion to HD Radio without creating substantial harmful interference to existing analog operations.

**V. Concerns With NPR Study**

Joint Parties recognize that the NPR Study predicts greater first adjacent analog interference than was observed in the recorded observations that support the HD Power Increase Request. However, Joint Parties respectfully observe that the NPR Study is based on multiple laboratory assumptions and predictions, with no real-world test component involving stations operating at elevated digital levels, unlike the studies documented in the HD Power Increase Request.

Moreover, while the testing associated with the HD Power Increase Request was designed to calculate and evaluate the impact that a discretionary digital FM power increase would actually have on analog and digital listeners (so that the Commission would have a substantive basis for acting on the HD Power Increase Request), the NPR Study is premised on a “worst case” scenario which “assumes that all existing stations affecting the subject facility have

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<sup>31</sup> See *Joint Parties Request*.

increased their IBOC power by a full 10%.”<sup>32</sup> However, the NPR Study itself acknowledges that this premise is unlikely to be realized in the near future as “roughly 14% of US broadcast radio stations are operating in HD Radio, thus the likely real-world impact of elevated interference percentages would be expected to be dramatically less for many stations for some time in the future.”<sup>33</sup> Joint Commenters believe that by adopting a worst case scenario, the NPR Study produced an unrealistic prediction of the impact that the requested digital power increase would have on analog operations.

It is also noteworthy that the NPR Study itself recognizes the rollout impediments facing HD Radio as a result of currently authorized low power levels. For example, the NPR Study acknowledges “significant under-service of digital versus analog coverage ... posing a problematic dilemma for stations that have invested heavily in original content for their new multicast HD Radio offerings.”<sup>34</sup>

Joint Parties understand from NPR’s recent public statements that it is not philosophically opposed to – and indeed sees the need for – a substantial digital power increase, but rather is concerned that there may be some circumstances in which limitations on digital power increases may be necessary to protect existing analog operations. Joint Parties are similarly concerned about the impact of harmful interference to analog operations from HD Radio. As a result, the Joint Parties hope to work with iBiquity and NPR Labs to isolate those limited circumstances in which a particular FM station’s digital operations may need to be conditioned to avoid the creation of unacceptable levels of harmful interference. In this regard, Joint Parties note that the HD Power Increase Request suggested that the Commission establish procedures pursuant to

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<sup>32</sup> *NPR Study*, at 41.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.* at 9.

which it would quickly investigate and promptly resolve any valid, documented allegations of harmful interference proximately caused by a digital FM power increase.

## **VI. Conclusion**

For the reasons stated above, based upon the test reports that have been submitted in connection with the HD Power Increase Request, and taking cognizance of the fact that the Request expressly contemplated expeditious resolution of any unexpected harmful interference that may result from increased digital FM power, Joint Parties respectfully request the Commission permit FM broadcast stations increase digital power from the current maximum of -20 dBc to up to -10 dBc below the station's analog carrier, subject to a special limitation with respect to Super B stations of the higher of (i) -20 dB relative to their analog carrier or (ii) at least 10 dB below the maximum analog power authorized for this class of station as adjusted for height, absent any grandfathered super power.

Respectfully submitted,

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